

**NORTH CAROLINA DIVISION OF
AIR QUALITY**

Air Permit Review

Permit Issue Date:

Region: Mooresville Regional Office
County: Catawba
NC Facility ID: 1800523
Inspector's Name: Tonisha Dawson
Date of Last Inspection: 05/27/2015
Compliance Code: 3 / Compliance - inspection

Facility Data Applicant (Facility's Name): R & D Plastics of Hickory Ltd. Facility Address: R & D Plastics of Hickory Ltd. 345 26th Street Drive SE Hickory, NC 28602 SIC: 3089 / Plastics Products, Nec NAICS: 326199 / All Other Plastics Product Manufacturing Facility Classification: Before: Title V After: Title V Fee Classification: Before: Title V After: Title V				Permit Applicability (this application only) SIP: N/A NSPS: N/A NESHAP: N/A PSD: N/A PSD Avoidance: 15A NCAC 02Q .0317 of 2D .0530 NC Toxics: 15A NCAC 02Q .0711 112(r): N/A Other: N/A			
Contact Data				Application Data			
Facility Contact David Duncan, Jr. President/CEO (828) 431-4660 345 26th Street Drive SE Hickory, NC 28602	Authorized Contact David Duncan, Jr. President/CEO (828) 431-4660 345 26th Street Drive SE Hickory, NC 28602	Technical Contact David Duncan, Jr. President/CEO (828) 431-4660 345 26th Street Drive SE Hickory, NC 28602	Application Number: 1800523.14A Date Received: 08/04/2014 Application Type: Modification Application Schedule: TV-1st Time Existing Permit Data Existing Permit Number: 09321/R04 Existing Permit Issue Date: 08/21/2013 Existing Permit Expiration Date: 09/30/2017				
Total Actual emissions in TONS/YEAR:							
CY	SO2	NOX	VOC	CO	PM10	Total HAP	Largest HAP
2014	---	---	67.00	---	---	---	--- [---]
2013	---	---	80.00	---	---	---	--- [---]
2011	---	---	25.20	---	---	---	--- [---]
Review Engineer: Richard Simpson Review Engineer's Signature: _____ Date: June XX, 2016				Comments / Recommendations: Issue: 09321T05 Permit Issue Date: June XX, 2016 Permit Expiration Date: May XX, 2021			

I. Purpose of Application

R & D Plastics of Hickory Ltd. currently holds minor source Permit No. 09321R04 with an expiration date of September 30, 2017 for producing various plastic foam products located in Hickory, Catawba County, North Carolina. The primary purpose of this application is for a permit reclassification from a minor source to a Title V source and to issue the facility a 1st Time Title V air permit. The application was received on August 4, 2014, which was at least nine months prior to the expiration date, as required by General Permit Condition 3.K. Therefore, the existing permit shall not expire until this permit has been issued or denied. All terms and conditions of the existing permit shall remain in effect until the permit has been issued.

II. Facility Description

R & D Plastics operates three main plastic lines at the facility in Hickory. The lines utilize isobutane to blow foam tubing for various applications. Polyethylene pellets are transported to the plant by truck and then stored in silos. Polyethylene resins are transferred to blending stations where other additives are mixed and fed to screw-type foam extruders. The resin is heated in the extruder to produce a homogeneous melt. The blowing agent, isobutane, is injected into the polymer via a high pressure system. A large revolving screw directs the melted resin toward a die to produce the desired shape of the final product. The product, which might be used for swimming noodles or furniture foam, is cooled before being packaged in the warehouse.

III. History/Background/Application Chronology

August 21, 2013 – Permit **09321R04** was issued to the facility with the condition that the facility submit a complete Title V application within one year.

August 4, 2014 – Permit application **1800523.14A** was received for a Title V classification.

April 5-8, 2016 – Discussed information about PSD avoidance limitations with facility representative Donny Hitt.

April 20-29, 2016 – The facility, Mooresville Regional Office, and Stationary Compliance Section were requested by the Permitting Section to comment on the updated renewal. Comments were received and included in the permit.

April XX, 2016 – DRAFT permit sent to public notice and EPA for review prior to issuance. The 30-day public comment period ended **May XX, 2016** with the receipt of no comments. The 45-day EPA review period ended **June XX, 2016** with the receipt of no comments.

IV. Permit Modifications/Changes and TVEE Discussion

The following table lists all modifications associated with this permit action:

Page(s)	Section	Description of Change(s)
Cover and throughout	Throughout	Updated all tables, dates, and permit revision numbers. Also updated from Synthetic Minor permit to Title V permit.
Throughout	Throughout	Corrected the regulatory reference from 2D and 2Q to 02D and 02Q.
Attachment	Insignificant Activities List	Corrected the isobutene storage tank (IES-Tank) from 7,600 gallon capacity to 6,800 gallons per recommendation from the regional inspector.
Attachment	Insignificant Activities List	Added dry material storage silos as IES-Silos
Attachment	Insignificant Activities List	Added 100 GPM cooling towers as IES-Cooling.
3	Section 2.1.A.	Inserted table with previous and new applicable regulatory standards. The new standards listed in the table are 15A NCAC 02D .0515, 15A NCAC 02Q .0317 to avoid 15A NCAC 02D .0530, 15A NCAC 02Q .0711, and 15A NCAC 02D .0958.
4	Section 2.1.A.1.	Added emission standard 15A NCAC 02D .0515 "Particulates From Miscellaneous Industrial Sources" for the listed sources.
4 - 5	Section 2.2.A.1.	Added emission standard 15A NCAC 02Q .0317 Avoidance Conditions for 15A NCAC 02D .0530 "Prevention of Significant Deterioration" with volatile organic compound emission limitation of 249 tons per year and total usage of isobutane of 825 tons per year.
5	Section 2.2.B.1.	Added facility wide and state-enforceable only emission standard 15A NCAC 02Q .0711 "Toxic Air Pollutant Emission Limitation Requirement".
6 - 7	Section 2.2.B.3.	Added facility wide emission standard 15A NCAC 02D .0958 "Work Practices for Sources of Volatile Organic Compounds".
8 - 18	General Conditions	Updated to latest version of DAQ shell version 4.0 12/17/15.

There were changes made to the Title V Equipment Editor (TVEE) under this permit renewal.

V. Regulatory Review/Equipment Changes

The facility is currently subject to the following regulations:

- 15A NCAC 02D .0515, "Particulates from Miscellaneous Industrial Processes"
- 15A NCAC 02D .0521, "Control of Visible Emissions"
- 15A NCAC 02D .0958, "Work Practices for Sources of Volatile Organic Compounds"
- 15A NCAC 02D .1806, "Control and Prohibition of Odorous Emissions"
- 15A NCAC 02Q .0317, "Avoidance Conditions (for 15A NCAC 02D .0530, Prevention of Significant Deterioration)"
- 15A NCAC 02Q .0711, "Emission Rates Requiring a Permit"

An extensive review for each applicable regulation is not included in this document, as the facility's status with respect to these regulations has not changed. For a discussion of MACT, CAM, and PSD requirements, see Section 6. The permit will be updated to reflect the most current stipulations for all applicable regulations.

VI. NSPS, NESHAP/MACT, PSD, 112(r), CAM, and GACT:

New Source Performance Standards (NSPS)

The facility is not currently subject to any new source performance standards. This permit action does not affect this status.

National Emission Standards for Hazardous Air Pollutants (NESHAP)/Maximum Achievable Control Technology (MACT)

The estimated maximum potential emission of total HAPs is less than three pounds per year. The facility is not currently subject to any NESHAP/MACT standards. This permit action does not affect this status.

Prevention of Significant Deterioration (PSD)/National Ambient Air Quality Standards (NAAQS)

This facility was reclassified from a minor source to a Title V source due to emissions of volatile organic compounds (VOC). To comply with this permit and to avoid the applicability of 15A NCAC 02D .0530, "Prevention of Significant Deterioration (PSD)", the facility's VOC emissions from sources (ID Nos. ES-Line1, ES-Line2, and ES-Line3) shall be less than 249 tons per year per consecutive 12-month period. To ensure enforceability of this limit, the total usage of isobutene shall not exceed 825 tons per consecutive 12-month period.

All counties in NC were re-designated as attainment effective August 27, 2015. [Ref: Federal Register /Vol. 80, No. 144 /Tuesday, July 28, 2015 /Rules and Regulations.] R & D Plastics is minor for PSD because it has accepted an avoidance condition under 15A NCAC 02D .0530 applicability, to limit VOC emissions to less than 249 tons per year. This permit does not affect the PSD status of the facility. Although Catawba County's minor source baseline for PM₁₀ has been triggered; there are no emissions increases or decreases associated with this permit.

112(r)

The facility's isobutene storage tank (**ID No. IES-Tank**) is subject to Section 112(r) of the Clean Air Act and shall comply with all applicable requirements in accordance with 40 CFR Part 68. The Permittee is required to revise and update the risk management plan submitted under 40 CFR 68.150 according to the requirements specified in 68.190(b)(2) through (b)(7). This permit action does not affect this status. As part of this permit renewal, the 112(r) language has been modified to indicate the facility is required stay current with the regulations.

CAM

The facility is not currently subject to any compliance assurance monitoring standards. There are no control devices at this facility. This permit action does not affect this status.

GACT

All counties in NC were re-designated as attainment effective August 27, 2015. R & D Plastics has accepted an avoidance condition limiting VOCs to less than 249 tons per year to avoid applicability to GACT. This permit action does not affect this status.

VII. Facility Wide Air Toxics (State Enforceable Only)

Facility-wide affected sources are subject to the TPER as listed in 15A NCAC 02Q .0711 for acetaldehyde, formaldehyde, and methyl ethyl ketone. The potential emissions for all three pollutants is less than ten pounds per year. A permit to emit either of these pollutants in quantities above the TPER rates requires the submittal of a permit application. No changes are needed under this permit action.

VIII. Facility Emissions Review

There is no change in Title V potential emissions for this permit action. Actual emissions from previous years are listed on Page 1.

IX. Compliance Status

DAQ has reviewed the compliance status of this facility. During the most recent inspection conducted on May 27, 2015, Tonisha Dawson of the MRO indicated that the facility appeared to be in compliance with all applicable requirements.

Five year compliance history

A Notice of Deficiency was issued on September 27, 2013 for 112(r) recordkeeping requirements. The deficiency has been resolved, and the facility is in compliance.

X. Public Notice/EPA and Affected State(s) Review

A concurrent public notice period of 30 days and an EPA review period of 45 days are required for the issuance of this Title V permit. A notice of the DRAFT Title V Permit shall be made pursuant to 15A NCAC 02Q .0521. The notice will provide for a 30-day comment period, with an opportunity for a public hearing. Copies of the public notice shall be sent to persons on the Title V mailing list and EPA. Pursuant to 15A NCAC 02Q .0522, a copy of each permit application, each proposed permit and each final permit pursuant shall be provided to the EPA. Also pursuant to 02Q .0522, a notice of the DRAFT Title V Permit shall be provided to each affected State at or before the time notice is provided to the public under 02Q .0521 above.

EPA's 45 Day Review period

Ms. Heather Ceron (U.S. EPA, Region IV) was provided a PROPOSED permit for review on May XX, 2016. The EPA 45 day review period ended on June XX, 2016. No comments were offered or received.

Public Notice

The 30-day public notice of the proposed permit was posted on the NCDAQ website on May XX, 2016. No comments were offered or received.

XI. Other Regulatory Considerations

- A P.E. seal is NOT required for this application.
- A zoning consistency determination is NOT required for this permit action.
- Since this application was a permit action with no modification, no emission increases were noted for the PSD increment tracking purposes.

XII. Recommendations

The permit renewal application for R & D Plastics of Hickory Ltd. in Hickory, Catawba County, North Carolina has been reviewed by DAQ to determine compliance with all procedures and requirements. DAQ has determined that this facility is complying or will achieve compliance, as specified in the permit, with all requirements that are applicable to the affected sources. The DAQ recommends the issuance of Air Permit No. 09321T05.